Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for a gain control of a fiberoptic repeating system comprising:

mixing from a master repeater a locally generated modulated MODEM signal of a ~~predetermined~~ prescribed level with a RF signal and transmitting the mixed signal through an optical cable;

detecting at a slave repeater a modulated MODEM signal level from the mixed signal transmitted by the master repeater;

comparing, at the slave repeater, the detected modulated MODEM signal level with a reference level and obtaining a difference between the levels, wherein the reference level is ~~a predetermined~~ the prescribed level unless the master repeater transmits a control signal of a base station; and

adjusting a gain of an amplifier for the RF signal in the slave repeater by using the obtained difference to calculate the gain adjustment.

2. (Original) A method of claim 1, wherein the modulated MODEM signal is detected by a controller of a slave repeater.

3. (Cancelled)

4. (Previously Presented) A method of claim 1, wherein controlling the gain of the amplifier comprises increasing a level of the RF signal by the obtained difference.

5. (Currently Amended) A method for a fiberoptic repeating system comprising:

~~transmitting~~ receiving from a base station a first RF signal;

amplifying the first RF signal by a constant level through an amplifier of a master repeater;

mixing a locally generated first modulated MODEM signal of a ~~predetermined~~ prescribed level with the first amplified RF signal and transmitting the mixed signal through an optical cable to a slave repeater;

receiving and separating the mixed signal into a second modulated MODEM signal and a second RF signal, and detecting a modulated MODEM signal level from the second modulated MODEM signal;

comparing, at the slave repeater, the ~~detected~~ modulated MODEM signal level with a reference level and obtaining a difference between the levels, wherein the reference level is the ~~predetermined~~ prescribed level unless the master repeater transmits a control signal of [[a]] the base station;

controlling a gain of an amplifier for the RF signal in the slave repeater based upon said obtained difference; and

amplifying the second RF signal according to the controlled gain and transmitting the second amplified RF signal to terminal.

6. (Currently Amended) A method of claim 5, wherein the modulate MODEM signal level is detected by a controller of the slave ~~reporter~~ repeater.

7. (Cancelled)

8 (Previously Presented) A method of claim 5, wherein controlling the gain of the amplifier for the RF signal in the slave repeater comprises increasing a level of the second RF signal by the obtained difference.

9. (Currently Amended) A method of controlling gain in a fiberoptic communication system, comprising:

combining a locally generated monitoring signal of a predetermined prescribed level with an RF signal, wherein the monitoring signal of a prescribed level comprises a modulated gain control signal;

transmitting the combined monitoring and RF signals to a slave repeater;

receiving and separating the transmitted monitoring signal from the transmitted RF signal at the slave repeater;

comparing, at the slave repeater, a level of the ~~transmitted~~ received monitoring signal with the ~~predetermined~~ prescribed level~~, wherein the monitoring signal of a predetermined level comprises a modulated MODEM signal~~; and

adjusting a gain applied to the ~~transmitted~~ received RF signal by using a result of the comparison to calculate the gain adjustment.

10. (Cancelled)

11. (Previously Presented) The method claim 9, wherein the transmitting step comprises:

converting the combined monitoring and RF signals into an optical signal; and

transmitting the optical signal to the slave repeater via an optical fiber.

12. (New) An optical repeater system, comprising:

a master repeater configured to receive an RF signal, generate a modulated reference signal, combine the RF signal with the modulated reference signal, and convert the mixed signal to an optical signal for transmission over an optical cable; and

a slave repeater, configured to receive the optical signal from the optical cable, convert the optical signal to a received mixed signal, split the received mixed signal into a received RF signal and a received modulated signal, compare the received modulated signal to a reference value, and amplify the received RF signal according to a result of the comparison.

13. (New) The optical repeater system of claim 12, wherein the Master repeater comprises a modem to generate the modulated signal, and wherein the slave repeater comprises a modem to demodulate the received modulated signal.